Hecla
MINING COMPANY

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October 10, 2005

Sent via U.S. Mail

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for September 2005 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the September 2005 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4135 or e-mail at cgypton@hecla-mining.com.

Sincerely,

Chris Gypton
Project Manager

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)

Hecla
MINING COMPANY

October 10, 2005

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
P.O. Box 448
Santa Clara, Utah 84765

John Krause
Bureau of Indian Affairs Phoenix Area Office
U.S. Department of Interior
P.O. Box 10
Phoenix, AZ 85001

Deborah Hamlin
BIA Southern Paiute Field Station, Branch of Natural Resources
P.O. Box 720
St. George, UT 84771

RE: Progress report for September 2005 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Hamlin:

Per paragraph 64 of the Order, enclosed is a copy of the September 2005 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4135 or e-mail at cgypton@hecla-mining.com.

Sincerely,

Chris Gypton
Project Manager

Encl

Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)

Hecla
MINING COMPANY

October 10, 2005

MEMORANDUM TO: Paul Glader

COPIES TO: file, distribution

FROM: Chris Gypton

SUBJECT: **Progress Report No. 17 for period ending September 30, 2005; Pond 2 Final Closure - Apex Site, Washington County, Utah**

Summary

Weather conditions at the site were satisfactory all month. No measurable precipitation was reported by site personnel.

The contractor began excavating to locate the top edge of the existing liner on September 6th. By the close of the month approximately 1,500 lineal feet of this edge, nearly 90%, had been exposed. The edge of the existing liner was found in poor condition in some areas. The Project Engineer inspected the damaged areas and outlined a method to repair them with GCL material. Re-sloping of the embankment was also started; approximately 30% of this work was completed in the month. Scheduled pumping of the drainage sumps ended with the startup of the Phase III earthwork activities. The evaporation basins and dewatering sumps were filled in.

The GCL installation subcontractor inspected the subgrade at the end of the month and agreed it was suitable for placement of the lining material. This contractor will mobilize and begin work the week of October 9th.

The final cover is expected to be complete by the week of November 13th.

Major Issues

1. BIA demand to have Pond 2 removed from Shivwits' property – A response to BIA's July 12th letter was issued on August 2nd. BIA submitted a follow-up letter dated August 25th stating they will provide additional justification for removal of Pond 2. This issue is still not resolved, however we are proceeding with Phase III with the force majeure provisions in the 7003 order still in effect.
2. Actual condition of existing liner edge – Several ragged or irregular section have been found on the top edge of the existing liner. The Project Engineer recommended a GCL and bentonite patch to supplement the existing material and provide an adequate substrate for the cover liner. Refer to Supplemental Attachments for additional information. This additional work has to be done by hand, and has delayed the start of installation of the cover liner by about two weeks.

Work Planned for Next Period

1. Continue management of the existing seepage collection system as required.
2. Complete embankment re-grading.
3. Survey the location of the existing liner before completing the final cover.
4. Complete subgrade preparation.
5. Install the GCL and start placing the protective cover.
6. Start diversion ditch regarding and installation of rip-rap protective layer.

Work in Process

Procure Outside Services

1. Arrangements were made with Applied Geotechnical and Engineering Consultants (St. George, Utah) to provide compaction testing.

Procure Materials

1. GCL delivery has been re-scheduled for the week of October 9th. The installation subcontractor plans to install the material as it is delivered in lieu of storing the entire material requirement at site.

Contractor Submittals

1. Product submittals for the GCL materials were reviewed by the Project Engineer on September 9th and found to conform with the specifications.

Seepage Collection System Maintenance

1. Seepage collection system was monitored concurrently with earthwork activities; seepage has effectively ceased. The collection system will be removed by mid October.

Phase II Drain/Evaporate Excess Water

1. This phase of work was terminated the week of September 5th; the drainage sumps and evaporation ponds were filled in during the month. Any localized saturation encountered during embankment re-grading will be removed with temporary sumps, the liquid pumped to the center of the impoundment and allowed to evaporate. During the month three locally saturated areas were identified. Less than 100 gallons of liquid was recovered from each location and the areas dried up within a day.

Phase III Final Cover Construction

1. Embankment excavation started on September 6th. By the end of the month approximately 1,500 feet of existing liner edge had been exposed. Re-sloping and compaction of the top of the impoundment was also started.
2. The four evaporation basins were filled in with compacted earth. All dewatering sumps were also filled in and pipe projecting above grade was cut off flush with the subgrade.
3. The GCL installation subcontractor inspected the subgrade on September 30th and agreed it was acceptable provided large rocks and other debris are not projecting above the subgrade. This contractor will mobilize and begin work the week of October 9th. GCL installation is expected to take around two weeks. An additional week will be required to complete installation of the 12 inch thick protective cover.

Sampling and Analysis in Period

Material Characterization

1. No activity

Field Tests, Inspections & QA/QC

1. The Project Engineer (Monster Engineering) inspected the work on September 21st, the field report is included in the Supplemental Attachments section.
2. Four random compaction tests were done on September 27th on fill areas at the top of the impoundment. All tests equaled or exceeded the 90% minimum specification. A copy of the field test report is included in the Supplemental Attachments section. Additional testing is scheduled for early October as the embankment regarding is completed.

Cost and Schedule

Committed costs in September 2005 were approximately $141,600. Total project to date committed is approximately $730,400. Forecast cost at completion is expected to be $1,190,800.

The cost report for September is attached. Current status of the deliverables listed in the RCRA 7003 order is as follows:

Deliverable	Reference Paragraph	Due	Remarks
Post warning signage around perimeter of site	57	**15 days after effective date of order**	Work completed on March 9, 2004
Begin implementation of closure plan	63	**45 days after receipt of filing of order**	Work started on February 23, 2004
Monthly progress reports	64	**28th day after close of month**	Requirement in effect after order is filed.
Completion report	65	**30 days after completion of all closure plan tasks**	To be submitted within 30 days after work has been physically completed and all contracts closed out.

The update of the schedule milestones is on the following table:

Milestone	Target	Actual	Remarks
Issue bid package – Phase I (Sump Drains)	6/14/04	***6/15/04***	Portion of RFP materials issued at pre-bid on 6/14/04; remainder sent via courier
Issue RFP package – Phase III	6/24/04	***6/24/04***	
Award contract for Phase I	6/24/04	***6/29/04***	Date contract was shipped to Hughes
Pre-bid meeting – Phase III	7/19/04	***7/19/04***	
Start Phase I (Sump Drains) construction	7/12/04	***7/19/04***	
Start Phase II (Evaporation)	7/19/04	***7/29/04***	
Receive bids for Phase III	8/2/04	***8/2/04***	
Re-bid Phase III contract package	April 2005	***4/27/05***	Date bid package was sent to Hughes
Start Phase III construction	End of August 2005	***8/29/05***	Start of contractor mobilization
Complete Phase III construction	Mid Nov. 2005		Revised target based on progress to date

Supplemental Attachments

1. "Site Visit and Construction Review", memo dated September 29, 2005 by Doug Gibbs, P.E., Monster Engineering, Inc.

2. "Fill Observation and Testing Report", September 27, 2005, by Applied Geotechnical Engineering Consultants, P.C.

Hecla Mining Company

Apex Site
Pond 2 Final Closure
Project Cost Report

Date Printed:10/10/2005

Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 9-30-05	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phase I - Drain Excess Liquid From Tailings							
Test wick program - Nilex		35,000		35,000	0	35,000	
Earthwork during wick test program		2,000		1,768	0	1,768	
Install drainage piping and sumps:							
Contractor mobilization/demobilization		5,500		5,500	0	5,500	
Install sumps - material & labor		20,000		24,500	0	24,500	
Build surface evaporation ponds		2,700		838	0	838	
Remove existing evaporation ponds		2,000		0	0	0	Work moved to Phase III
Bury existing pond material & regrade		2,000		0	0	0	Work moved to Phase III
Survey monuments		3,500		1,160	0	1,160	Cost to complete transferred to As-built drawing line item
Subtotal Phase I	**189,200**	**72,700**		**68,766**	**0**	**68,766**	
Phase II - Evaporate Excess Liquid							
Operate evaporation & pumping system		8,000		9,585		9,585	FY 2004 work only
Test pits to determine dewatering progress				1,320		1,320	
Upgrade evaporation cells & collection sumps				132,114		132,114	
Dewatering & seepage collection management			5,000	99,488	5,000	104,488	T&M labor + equipment; February '05 through Oct '05
Subtotal Phase II	**6,000**	**8,000**	**5,000**	**242,487**	**5,000**	**247,487**	
Phase III - Regrading & Final Cover System							
Contractor mobilization/demobilization		20,000	28,800	33,226	19,200	52,426	
Excavate existing embankment		15,000	72,800	72,800	71,700	144,500	*Incl misc. repairs to existing liner edge added to scope*
Final grading of 1% surface		2,500		0	0	0	Incl w/ 12" protection layer
Place barrier layer (GCL) - top		200,000		0	167,000	167,000	
Place barrier layer (GCL) - outslopes		50,000		0	0	0	Incl w/ GCL cover cost
Excavate diversion channel		9,100		0	40,000	40,000	
Place 12" protection layer on top surface		19,000		0	56,000	56,000	*Incl $6,000 allowance for hydroseeding added to scope*
Reconstruct outside embankment		7,350		0	0	0	Incl w/ excavation of existing embankment
Finish grade 1% surface - top		3,000		0	0	0	Incl w/ 12" protection layer
Place surface layer at outslopes (D50 = 1")		4,800		0	0	0	Incl w/ 12" protection layer
Recontour diversion channel for drainage		2,000		0	0	0	Incl w/ diversion channel exc
Place diversion channel erosion protection (3" rock)		3,800		0	0	0	Incl w/ diversion channel exc
Surveying - diversion channel drainage		2,500		0	0	0	Incl w/ diversion channel exc
Remove existing evaporation ponds		0		0	0	0	Incl w/ excavation of existing embankment
Clear site for construction		3,000	7,500	0	7,500	7,500	
Performance & Payment Bond		0		0	0	0	Requirement waived
Subtotal Phase III	**337,000**	**342,050**	**109,100**	**106,026**	**361,400**	**467,426**	
Field Indirect Costs							
Construction Management labor		108,360	18,185	194,221	38,900	233,121	
Construction Management field expenses		38,575	4,643	44,482	9,875	54,357	
Field office trailer		6,525	165	3,158	830	3,988	
CQA testing		9,200	750	750	16,350	17,100	
CQA completion report		5,000		0	5,000	5,000	
Survey and layout		2,208		348	2,360	2,708	Includes as-built survey
Material classification tests		1,500		5,762	2,500	8,262	
Consulting Engineer		42,200	3,500	44,259	9,400	53,659	
Subtotal Consultants	**164,500**	**213,568**	**27,243**	**292,979**	**85,215**	**378,194**	
Hecla Costs							
Labor	15,500	15,500	304	18,047	6,300	24,347	
Travel expenses	3,200	3,200		2,098	2,500	4,598	
Subtotal Hecla Costs	**18,700**	**18,700**	**304**	**20,146**	**8,800**	**28,946**	
Total Pond 2 Final Closure	**715,400**	**655,018**	**141,847**	**730,402**	**460,415**	**1,190,817**	

Prepared By: Hecla Mining + Gila Management, LLC

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MONSTER ENGINEERING INC
ENGINEERING ▫ DESIGN ▫ MANAGEMENT
3031 bonner spring ranch road
laporte, colorado 80535
(970) 221.7177
cell (970) 219.1335
fax (970) 224.0161
email: monster@peakpeak.com

MEMORANDUM

TO: Chris Gypton (Hecla Mining Company)
CC: Jeff Smith / Al Cain / Dave Jones (Gila Management, LLC)
FROM: Doug Gibbs (Monster Engineering Inc.)
DATE: 9/29/05
SUBJECT: **Site Visit and Construction Review - Apex Site**

MEI visited the Apex Site on September 21st, 2005 to:

- review construction activities to date
- discuss specific design features
- provide design guidance on specific issues concerning Pond 2 Closure

Enclosed with this memorandum are 7 photos taken during the visit which show specific areas reviewed with Gila Management and Hughes (the general contractor).

Overall construction appeared to be progressing quickly with no major concerns. Weather conditions have been excellent. Work to expose the existing liner and cut back the old embankment materials were almost completed, and efforts were beginning on final existing liner cleaning. The existing liner showed some signs of damage, however most of these areas were very minor in scale. Hughes was doing a good job at exposing liner and minimizing damage. Placement, grading, and compaction of the re-graded top surface was also progressing quickly with acceptable lift thicknesses and application of sufficient compaction. General areas reviewed and particular items discussed are listed below.

Exposure of Existing Liner
Several damage areas were examined and several methods of attempting patches were discussed. The agreed upon resealing method was to patch all damaged areas with GCL overlaid a minimum of 18 inches (horizontal) over the existing liner. A minimum 1 inch thick powdered / granular bentonite seal will be placed between the exiting liner and new GCL "patch".

Methods to remove existing waste / old embankment materials (OEM) from the existing liner were discussed. Hughes will continue with their current method using a large excavator to remove the bulk of the materials, along with a small excavator and laborers with shovels to remove minor quantities down to the exiting liner. Remaining waste / OEM will then be allowed to air dry and will subsequently be broom brushed by hand. A minimum of 2 feet of existing liner will be exposed in this manner to allow for a sufficient tie-in with the new GCL.

Bentonite Layer Thickness
A minimum of 1 inch of powdered / granular bentonite will be installed between the exiting liner and GCL.

Subgrade Completion and Compaction Testing
No compaction tests had been completed as of this site visit. We discussed and agreed on methods for completing a proctor for the materials as they are highly variable. Compaction was being accomplished with a sheepsfoot roller, and haul truck and dozer traffic. Layer placement was less than 1 foot. Compaction on certain very limited outslope areas will not be possible due to over-optimum moisture in these materials. Methods for removing and disposing of oversized and protruding rocks were discussed and agreed upon.

Final Grading Methods and Specifications
We reviewed that the maximum top slope surface is 1%. If additional waste / OEM storage is required then the entire top surface will be raised to accommodate this material. Hughes will utilize a grader and laser level to final grade the top surface.

Diversion Channel / Cover Material Borrow Area
All questions concerning invert location, design intent, borrow area limits and depths, and erosion protection location and intent were discussed and agreed upon.

Liner Disposal
Disposal techniques for the remaining collection pond liner materials were reviewed. The liner will be cut, layered, and buried within the impoundment in a way as to minimize potential future consolidation of these materials.

Settlement Monuments
The intent and placement of the settlement monuments was discussed. Monuments serve as one method of observing overall long-term reclamation performance specifically related to consolidation of the buried materials.

Temporary Diversion / Stormwater Runoff
MEI suggested that during this phase of construction Hughes be sufficiently prepared to construct temporary containment berms at the embankment outslope toe in case of large precipitation events.

GCL
Items discussed and agreed upon included the location and depth of the tie-in trench, QA/QC, bentonite seal materials and thickness, overlap distance, GCL material types for the outslopes (needle-punched with acceptable shear strength as listed in the specifications) and top surface, and subgrade acceptance by the subcontractor.

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Photo 1 – Existing liner condition at top of original impoundment dike.

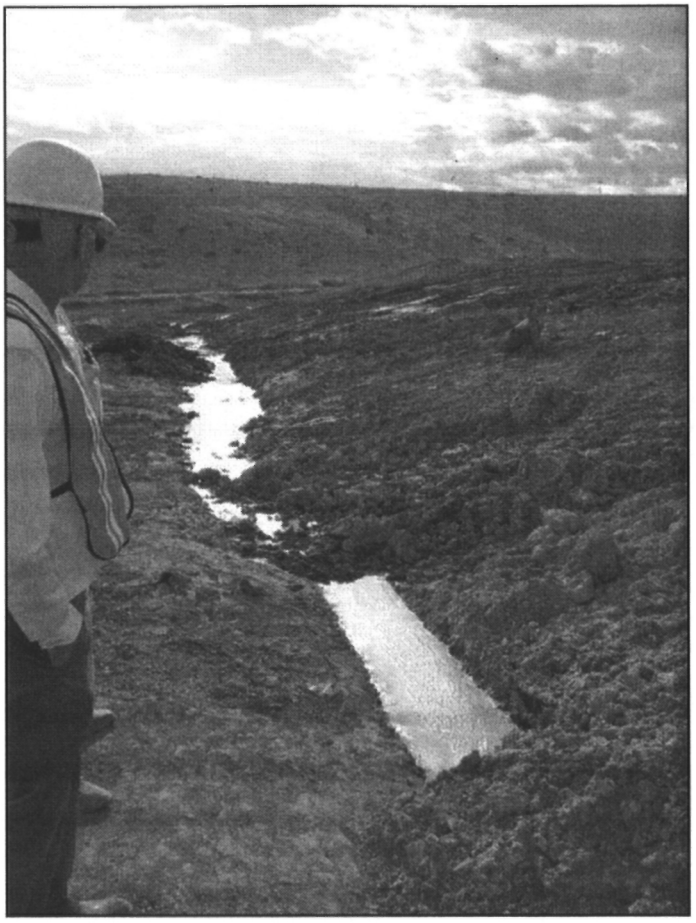

Photo 2 – Top of existing liner exposed on north side of impoundment.

Photo 3 – Top of existing liner exposed on east side of impoundment.

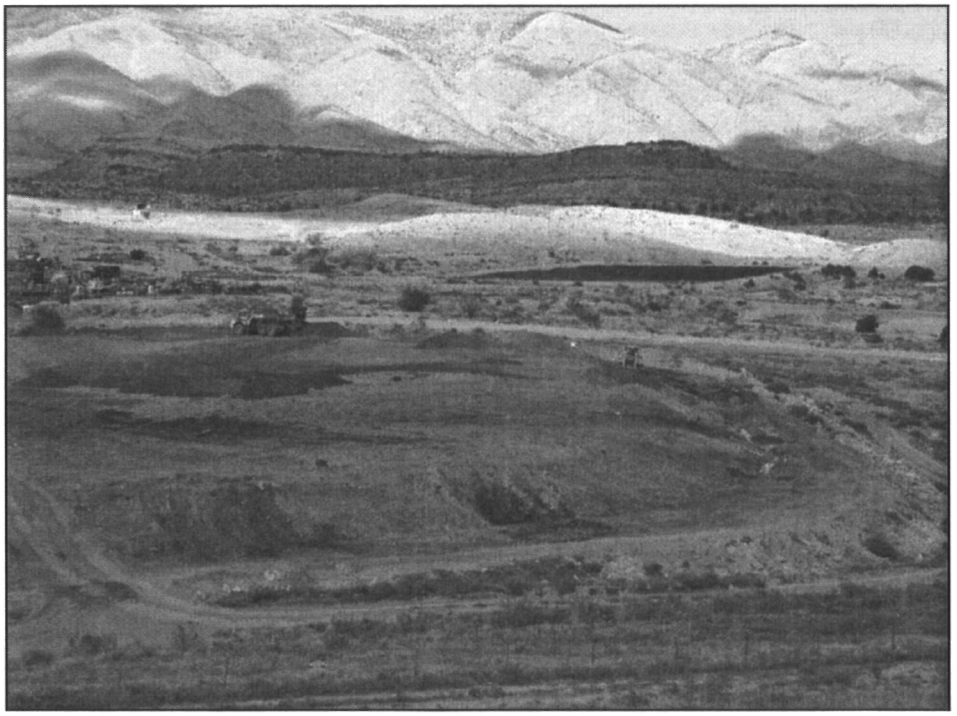

Photo 4 – General view of Pond 2 site looking northwest.

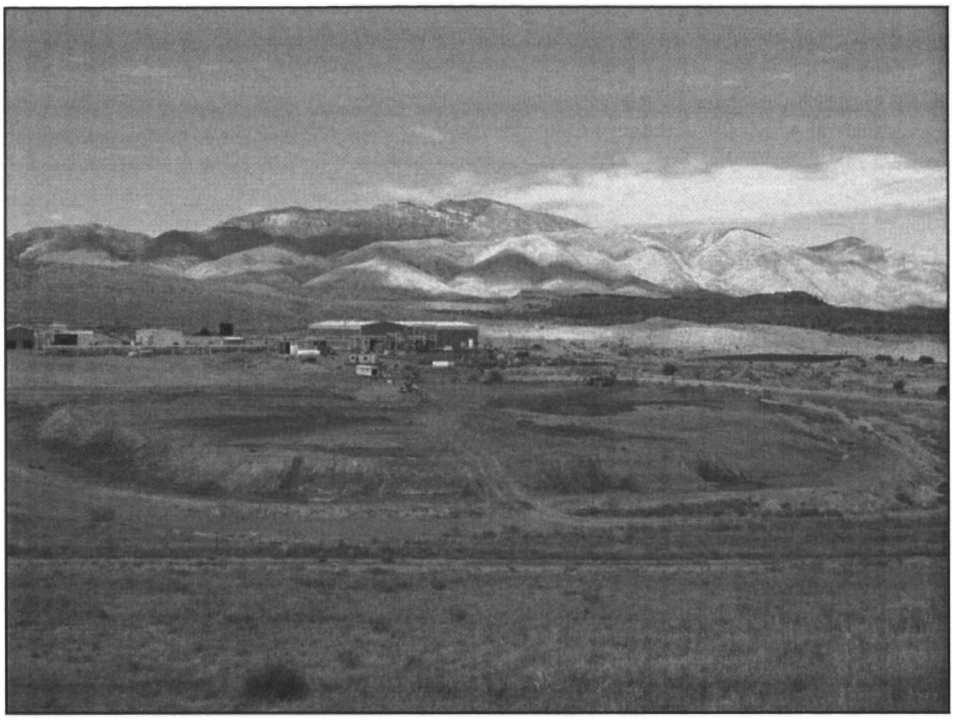

Photo 5 – General view of overall Apex site, looking west.

Photo 6 – Typical method to expose existing liner.

Photo 7 – Fine grained, plastic tailings temporarily exposed by embankment re-grading.

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Oct 10 05 09:40a Jeff Smith 520-885-4484 p.2

09/27/2005 18:51 7023467438 :MESQUITE BUDGET INN PAGE 02/06

AGEC

APPLIED GEOTECHNICAL ENGINEERING CONSULTANTS, P.C.

600 West Sandy Parkway
Sandy, Utah 84070
(801) 566-6399

158 West 1600 South
St. George, Utah 84770
(435) 673-8850

FILL OBSERVATION AND TESTING REPORT

PROJECT NAME: Apex OMG Pond Cap
PROJECT NO.: 2042208 DATE: 9/27/05
DESCRIPTION OF LOCATION: Cells

NUCLEAR GAUGE SERIAL NO.: 18646
DENSITY STANDARD COUNT: 2289
MOISTURE STANDARD COUNT: 720
PAGE: 1 of 1

TEST ID	LOC. CODE (on back of sheet)	LOCATION	TEST ELEV.	LABORATORY Proctor ID	LABORATORY MDD (PCF)	LABORATORY OMC (%)	FIELD Dry Density	FIELD Moisture Content	Compaction % Field	Compaction % Spec.	Retest Needed
1	1	26' of NW of origin point/pond	SG	A	133.0	8.5	127.0	4.3	96	90	N
2	↓	25' of NE of origin point/pond	↓	↓	↓	↓	126.1	2.3	95	↓	N
3	↓	100' of SE of origin point/pond	↓	↓	↓	↓	131.7	6.1	98	↓	N
4	↓	100' of SW of origin point/pond	↓	↓	↓	↓	130.0	2.8	98	↓	N

Remarks: A 0058 to D

Testing Requested By: All tests Passed

V. Nabor
FIELD OBSERVER

[signature]
REVIEWED BY

Proctor ID	ASTM Test Method	Soil Description
A		Clayey Sand w/ Gravel

This report presents opinions formed as a result of our observation of fill placement. We have relied on the contractor to continue applying the recommended compactive effort and moisture to the fill during times our observer is not observing operations. Tests are made of the fill only as believed necessary to calibrate our observer's judgment. Test data are not the sole basis for opinions on whether the fill meets specifications.

Services referred to herein were performed in accordance with the standard of care practiced locally for the referenced method(s) and relate only to the condition(s) observed or sample(s) tested at the time and place stated herein. AGEC makes no other warranty or representation, including source of materials submitted by others.